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THE NEWSBOY'S DAY.

CHARLEY POTTER is Polly Potter's biggest boy; and Polly Potter is a hard-working woman, with another boy and a baby to provide for, whose father died in the hospital the same week the baby was born. Mrs Potter lives in one of the courts running out of St Martin's Lane, in a central nest of struggling poverty and hardship, situated not very far from the National Gallery. Ever since Tom Potter's death owing to a fall from a scaffolding, to say nothing of the weary weeks he lay ill, it has been work or starve—do or die—with the Potter family. The club-money luckily came in at the death and birth, and helped the widow over the double trouble; and as soon as she got upon her feet, she set about helping herself. She took Charley, who was going in thirteen, and as sharp a young fellow as need be, away from school, and told him he must now go to work instead of his father—a proposition which the boy accepted in the very spirit of a young middy unexpectedly promoted to a lieutenancy; and thus it was that the child became, in a manner, a man at once. By the recommendation of Polly's old master, a tradesman in the Strand, Charley was helped to employment from a newspaper-agent, whom he serves manfully. While Polly is at home washing or ironing, or abroad charin' or nussin', little Billy meantime taking care of the baby, we shall amuse ourselves by following Charley through the routine of one day's operations. It may not be altogether time thrown away: there is many an old boy as well as a host of young ones who may learn a lesson from it.

It is a dark, dreary, and foggy morning in January; the wind is driving from the south-east, bringing along with it a delicious mixture of snow and rain; and it yet wants two hours of daylight, when Charley, slinking from the side of his sleeping brother, turns out of bed, and dons his clothes. He has no notion of washing his face just yet—that is a luxury which must be deferred till breakfast-time, which is a good way off at present. The pelting sleet, the driving wind, and the fog are such small trifles in his category of inconveniences, that he takes no more notice of them than just to button his jacket to the chin, and lug his cloth cap down over his eyes, as he gently shuts the door after him, and steps out into the darkness. Then he digs his hands into his pockets, and bending his head towards the storm in the attitude of a skater in a Dutch frost-piece, steers round the steps of St Martin's Church, and then straight on through the Strand and Temple-Bar, and along Fleet Street, near the end of which he disappears suddenly in the dark and narrow maw of Black-Horse Alley. This Black-Horse Alley is a

place of no repute at all: among all the courts and closes which debouch into Fleet Street on either side of the way, it is almost the only one which is not celebrated for something or somebody or other in records either literary or dramatic, ghostly or convivial. By daylight it is particularly dirty, dark, and unsavoury, having no outlet but a narrow one at the centre, on the right, which lands the explorer in Farringdon Street, opposite to the ruined gateway of what a few years ago was the Fleet Prison. A black horse, or a horse of any colour, once fairly in the alley, would find it a difficult matter to turn round, and would have to back out, or else, like an eel in a water-pipe, wait till destiny chose to release him. Wretched old tenements are the tall buildings on either side which shut out the daylight from the court, and one, the biggest of them all, belongs to an association of newsmen; being open all day, and very likely all night too, for we never saw it shut, it serves as a central dépôt whence whole tons of newspapers, received damp from the printing-machine, take their departure daily for all parts of the kingdom.

Here we must follow close upon the heels of Charley. Diving into the court, and proceeding a score of yards or so, we find the old house bathed in a flood of gaslight from top to bottom. Men and boys are rushing up and down the angular stairs, some with damp loads upon their backs, and others hastening off to procure them. The morning papers have all been 'put to bed,' as it is termed, and their respective machines are now rolling off copies, each at the rate of several thousands an hour. As fast as they come into being, they are counted off in quires, and borne away by the agents, who undertake to supply the country districts. An enormous number of them come on the shoulders of the newsboys to Black-Horse Alley. On the top-floor of the house—and we notice, as we ascend, that all the floors are furnished and occupied alike—we find Charley already at his work. He stands with a score of other lads and men, behind a continuous flat deal-board, which runs round the whole circuit of the floor, elevated on tressels, and standing about two feet from the wall. Those next him are folding, packing, and bundling up papers in time for the morning mail, which will carry them to Bristol and to Birmingham, more than a hundred miles distant, and to a hundred places besides, in time to lay them upon the breakfast-tables of the comfortable class. Charley, with paste-brush and printed addresses, is as busy as the best. *Post, Herald, Chronicle, Advertiser, and Daily News*, are flying about like so many mad flags amidst the clamour of voices, the stamping of feet, and the blows of hard palms upon wet paper. By and by the *Times*, which, on account of its omnivorous machine, can afford to sit up

longer, and go to bed later than its contemporaries, pours in a fresh flood of work. All hands go at it together; but as fast as one huge pile is cleared off, another comes, and neither the noise nor the activity relents until the moment for posting draws nigh, when the well-filled bags are hoisted on young shoulders, or piled on light traps waiting close by in the street—and off they roll or run to the post-office. Charley himself staggers out of Black-Horse Alley, looking, with a huge bag upon his shoulders, like a very great bird with a very small pair of legs, and in six and a half minutes—the exact time allowed—shoots his body into the aperture at St Martin's le Grand, and, catching up the emptied bag, which flies out upon him the next moment, walks leisurely away.

Charley knows now that the immediate hurry is over, and, in spite of the rain which still continues to drizzle down, he has a game at bolstering a comrade with his empty bag, in which friendly interchange of civilities the two together make their way, not back to Black-Horse Alley, but to their master's shop, at which they arrive before it is open, and before the neighbours are up. Here they meet half-a-dozen more boys, distributors hired by the week to do a few hours' work in the morning, in the delivery of newspapers to subscribers. The post-office, which will carry a stamped newspaper 100 or 500 miles for nothing, will not carry it a short distance without payment of a penny, and therefore the newsman has to deliver by private hand all papers within the limits. For this responsible commission, there are always plenty of candidates among the London boys; and here are half a dozen of them this morning waiting the arrival of the master with his budget. Pending his advent, as the rain peppers down unceasingly, they wrap their bags round their shoulders, and, arranging themselves in a rank under the projecting eaves of the shop-window, commence the performance of an impromptu overture with their heels against the wooden framework that supports the shutters which they are polishing with their backs. The neighbours know this sort of demonstration well enough; it is as good as Bow Bells to all within hearing, and has the effect of rousing many a sleeper from his bed. Day has dawned during the performance, and, soon after, the master's little pony-cart is seen in the distance rattling over the stones. He jumps out of the trap almost before it has stopped, throwing Charley the key of the shop-door. The boy has the door open and the shutters down in an instant; the piles of newspapers are transferred from their swaddling blankets to the counter, and as rapidly as is consistent with a cautious accuracy, they are allotted among the different distributors, each of whom, as he receives his complement, starts off upon his mission. Charley has a round to go over, the course of which has been suited to his convenience, as its termination will bring him within a short distance of his own home, where he arrives by nine o'clock.

Before breakfast, he makes his toilet, and rubs off the residuum of London particular which has accumulated upon his skin within the last twenty-four hours. This necessary preliminary settled, he addresses himself to sundry logs of bread and butter, and a basin of scalding coffee, which has been kept simmering on the hob for him. Solid and fluid are despatched with a relish that is to be earned only by early rising and out-door work. He talks as he eats, and tells his mother the news which he has contrived to pick up in the course of the morning—particularly about that murder over the water, and the

behaviour of 'the cove what's took in custody about it.' Perhaps he has an extra paper; and if so, he reads a bit of the police-reports, especially if anybody in the neighbourhood is implicated in one of the cases. Breakfast over, he gets back to his master's shop, where he finds a bundle of newspapers ready for him, which he is directed to get rid of at the railway station, if possible. For a certain reason, well known to master and servant, he has a decided fancy for this part of his business; and he loses no time in transporting himself to an arena always favourable to his branch of commerce. The bustle of trains arriving and departing excites his spirits and energies, and determined on doing business, he gives full scope to his lungs. '*Times, Times—to-day's Times! Morning Chronicle! Post! Advertiser! Illustrated News!* Who's for to-day's paper? Paper, gentlemen! News, news! Paper, paper, paper! *Chronicle! Chronicle!*—Who's for *Punch*?' In this way, he rings the changes backwards and forwards, not even pausing while engaged with a customer, and only holding his peace while the station is vacant. Then he takes breath, and perhaps, too, takes a dose of theatrical criticism from the columns of the *Chronicle*, or of the last new jokes in *Punch*. The arrival of a new batch of passengers wakes him up again, and he is among them in a moment, with the same incessant song and the same activity. His eyes are everywhere, and he never loses a chance; he cherishes the first-class carriages especially, and a passenger cannot pop his head out of window for a moment, without being confronted with the damp sheet of the *Times*, and assailed with the ringing sound of his voice. Charley generally continues this traffic till dinner-time, which with him is at one o'clock. Whether he continues it after that time, is a matter frequently left to his own discretion; and as he has an interest in exercising that upon sound principles, we may be sure he does the best he can.

The newsboy's dinner might be described in mathematical terms as an 'unknown quantity.' It may consist of a warm and savoury mess, discussed at leisure beneath the eye of his mother, or it may be a crust of bread and cheese, eaten in the streets while hurrying shopwards from the station of a railway, or the deck of a steam-boat. Sometimes he has to eat dinner and supper 'all under one,' cheating his appetite in the interim with a hunch of bread and a cup of coffee; at other times, he will patronise the pie-shops, and drape upon eel or mutton pies. But, dinner or no dinner, he must be at the beck and bidding of his master early in the afternoon, to give in an account of his sales and stock, and to assist in the important proceedings which have to be gone through before the departure of the evening mails. Of course, it is the object of every newsman to get rid, if possible, of all the papers he buys; for if they are kept to the next day, they are worth only half-price; and if a day beyond that, they are but waste-paper. The newsman, therefore, has in one sense to take stock every day—in fact, oftener; and the evening post-hour, which is six o'clock, is to be looked upon as the hour for striking a balance of profit, because whatever is left on hand after that hour has struck, is wholly or partially a loss. Newspapers which have been lent by the hour, have to be collected in time for the evening mail, or they may some of them be left for further hire, and go as half-price next morning. Charley is running about on this business for an hour or two in the afternoon; and it happens to-day that by five o'clock, or a little before, his master has discovered that he has more of one or two of the daily papers than he wants, and that he is short of others, which he must procure to supply his country customers. It would be very easy to purchase those he wants, but in that case it might be impossible to sell those he does not want, and the loss of the sum they cost would constitute an unwelcome drawback to the profits of the day's business. But it happens that there are a score

of other newsmen in the same awkward predicament—a predicament which is sure to recur to most of them every day in the week, and which has, therefore, be-gotten its own remedy, as all difficulties of the sort invariably do in London. The remedy is the Newspaper Exchange, which has its locality in no recognised or established spot, though it is oftener held in Catherine Street, Strand, or at St Martin's le Grand, in front of the post-office, than elsewhere. This Exchange, it is said, originated with the newsboys; and though it has been in existence, to our knowledge, for a dozen years at least, boys are the only members to this hour. It consists of a meeting in the open street, very rapidly assembled—the parties appearing on the ground soon after four in the afternoon, continuing to increase in numbers until after five—and still more rapidly dispersed, under pressure of the post-office, when the business of the hour has been transacted.

On the present occasion, Charley is intrusted with a dozen newspapers which are of no use to his employer, and his mission is to replace them by as many others, which are wanted to go into the country by the six o'clock post. He tucks them under his arm, and, it being already upon the stroke of five, is off towards 'Change as fast as he can run. He can hear the sharp eager cries of the juvenile stock-brokers as he rounds the corner: 'Ad. for Chron.,' 'Post for Times,' 'Post for Ad.,' 'Herald for Ad.,' 'Ad. for News,' &c., including well-nigh all the changes that can be rung upon all the London newspapers. He mingles with the throng, and listens a moment or two. At the sound of 'Ad. for Chron.' he explodes suddenly with a 'Here you are!' and the exchange is effected in that indefinite fraction of time known among newsboys as 'two twos.' *Times* for *Chron.* is an offer that suits him again, and again the momentary transfer is effected. Then he lifts up his own voice, 'Post for Times, *Chron.* for Times,' and, bestirring himself, effects half-a-dozen more exchanges in less time than we should care to mention—now and then referring to the list of his wants, and overhauling his stock, in order to be sure, amidst the excitement of the market, that he is doing a correct trade. He finds, after half-an-hour's bawling and bargaining, that he wants yet a *Times* and an *Advertiser*, and he knows there is a boy present who has them to dispose of, but Charley has not in his stock what the other wants in exchange. So he sets about 'working the oracle,' as he terms it: instead of bawling 'Chron. for Times,' which is the exchange he really desiderates, he bawls 'Chron. for Post,' because the boy with the *Times* wants a *Post* for it, which Charley hasn't got to give; but by dint of bawling he at length gets a *Post* for his *Chronicle*, and then he is in a condition to make the desired exchange. Sometimes, he will go so far as to 'work the oracle' three or four deep—that is, he will effect three or four separate exchanges before he has transmuted the newspaper he wanted to get rid of into the one he desired to possess—or changed bad stock into good: by such intricate exploits, he has obtained among his fellows the reputation of a 'knowing young shaver;' and it is to be hoped that he gets, in reward of his ingenuity, something more substantial from his employer, for which the little family at home is none the worse.

Before the affairs on 'Change have come to their sudden conclusion, Charley is back to the shop; and now all hands are busy in making up the big bag, which must start on its passage to the post-office, at the very latest, by ten minutes before six, the distance being fully a nine minutes' walk. There is the same ceremony with the evening papers as there was with the morning ones, and there is the same limit as to time for its performance. But what must be done *must*, and of course is done; and in a well-ordered concern, like that of which young Potter is a member, it is done in good time too. Before the race against the clock commences, Charley has got the bag hoisted on

his shoulders, and, with a fair couple of minutes to spare, is trudging steadily towards St Martin's le Grand. We shall leave him to find his way there, which he can do well enough without us, and walk on before, to see what takes place at the post-office at this particular hour of the day.

On ascending the steps of the huge building, which, huge as it is, is found to be all too small for the rapidly-increasing correspondence of the country, we find that we are by no means singular in harbouring a curiosity to witness the phenomena which attend upon the last closing minutes of the hour whose expiry shuts up the post for the night. The broad area between the lofty pillars that support the roof, is peopled with some hundred or two of spectators, come, like ourselves, to observe the multitudinous rush of newspapers and letters which, up to the very last moment, are borne by the living tide into the many-mouthed machine, which distributes them through the length and breadth of the land—nay, of the entire globe. Policemen are in attendance to keep a clear passage, so that the very last comer shall meet no obstruction in his path. The spectators marshal themselves on the right of the entrance, leaving the left free to all who have letters or papers to deposit. These comprise every class of the community, commercial and non-commercial—clerks from counting-houses, lawyers from the Temple, messengers from warehouses, young men and maidens, old men and merchants, rich men and poor men, idlers and busybodies. As closing-time approaches, and the illuminated dial above points to five minutes to six, the crowd increases, and the patter of approaching footsteps in quick time thickens on the ear. Sacks, of all shapes and sizes, bulgy and slim, are seen walking up the stairs—some as long as bags of hops, beneath which the bearers stagger unsteadily towards the breach; others, of more moderate capacity, containing but a couple of bushels or so of damp sheets; and others, again, of hardly peck measure. All discharge their contents into the trap nearest the entrance, in which operation they are assisted by a man in a red coat, who, from long practice, has acquired the knack of emptying a bag of any size and returning it to the owner with one movement of his arm. By and by, as the lapsing minutes glide away, he is besieged in his position by the rush of bags, and looks very likely to be buried alive, until somebody comes to his assistance. The bags, as fast as they arrive, disappear through the wide orifice, and anon come flying out again empty—you don't exactly see from whence. Here comes a monster-sack, borne by two men, which is with difficulty lugged into quarters, while others crowd after it, like a brood of chickens diving into the hole through a barn-door after the mother-hen.

Now is the critical moment—the clock strikes, clang!—in go a brace of bulky bags; clang! the second—in go three more, rolling one over another, and up rushes a lawyer's clerk, without his hat, which has flown off at the entrance, and darts forward to the letter-box at the further corner, fencing his way with a long packet of red-taped foolscap, with which he makes a successful lunge at the slit, and disappears; clang! the third—another brace of sacks have jumped down the throat of the post-office, and more yet are seen and heard scrambling and puffing up the steps; clang! the fourth—and in goes another bouncing bag, followed by a little one in its rear; clang! the fifth—nothing more, a breathless pause, and a general look of inquiry, as much as to say: 'Is it all over?' No! here comes another big bag dashing head-foremost up the steps; in it rushes like mad, when, clang! the sixth—and down falls the trap-door, cutting it almost in two halves as it is shooting in, and there it lies, half in and half out, like an enormous Brobdingnag rat caught in a murderous Brobdingnag trap, only wanting a tail to complete the similitude. The bearer, who is in a bath of perspiration, wipes the

dew from his face as he glances round with a look of triumph. He knows that if there is a doubt whether he was in legal time or not, he will, by established custom, be allowed the benefit of the doubt, and that because the post-office could not shut his bag out, they are bound to take it in. He is perfectly right: in less than a minute (minutes in this case are important), the bag is drawn in, and returned to him empty, and he joins the crowd who, the exhibition being over, disperse about their business. It is a very rare occurrence for a bag of newspapers to arrive too late for the evening post. We have known it to take place occasionally; but when it does happen, we suspect that if the failure were traced to its source, it would be found to arise from the enterprising spirit of some defiant newsboy, who had resolved to win a race against time, and had failed in doing it. Boys have been known before now (we have seen it done) to carry their bags within very good time to what they consider a practicable distance, and then to halt, waiting for the first stroke of the bell, the signal for a headlong scamper over the remaining ground, which has to be traversed while the clock is striking. It may well happen occasionally that this daring experiment is not successful, in which case the overconfident urchin has to return with his bag unloaded, to the consternation of his employer and his own disgrace.

Charley knows better than that. We have seen him discharge his load among the first arrivals; and now, in consideration of the early hour at which his services were required in the morning, his work is done for the day, and he strolls leisurely homeward. He is rather tired, but not knocked up, nor anything like it. There is a substantial supper waiting him, which, having well earned, he has a right to enjoy, as he does enjoy it, without a single feeling of dissatisfaction. After his repast, if the weather is dry, he will have a chase with young Bill round the fountains in Trafalgar Square; or if it is wet and cold, there will be a game with the baby before the fire; or if the baby should be asleep, Bill will get a lesson in pot-hooks and hangers, with slate and pencil for materials, and Charley for writing-master; or he will have to spell out a column of last week's news, subject to the corrections of his teacher. These pleasures and pursuits, however, cannot be protracted to a very late hour. Early rising necessitates early rest; and the boys are, therefore, despatched to bed when the bell of the neighbouring church rings out nine, that the newsboy may recruit, with needful repose, the strength required for the exertions of the morrow.

Saturday night is the bright spot in Charley's week. Then he gets his wages, which go to his mother; and then he can sit up as late as he likes, because he can get up as late as he likes on the morrow; and because he can do both, he will go to the play if he can manage to raise the necessary sixpence. He looks upon the drama, which he calls the 'drawner,' as the grandest of all our institutions, and he has very original ideas on the subject of plays and acting. He knows, as he says, lots of tragic speeches, and spouts them to Billy as they lie awake in bed, sometimes dropping off to sleep in the middle of a soliloquy. He has doubts whether the pantomime is quite legitimate, but wonders, with Billy, why it isn't played all the year round—is sure it would draw. He knows of course that *Hamlet* is 'first-rate,' and *Macbeth* the same; but his sympathies go with that little pig-tailed tar in the shiny hat at the Victoria, who, hitching up his canvas trousers with one hand, and shaking a short dumpy cutlass in the other, hacks and hews his way through a whole regiment of red-coats, who surprise him in the smuggler's cave, and gets clear off, leaving half of his adversaries dead on the stage. The valiant smuggler is Charley's hero, and he admires him amazingly, never giving a thought to the why or wherefore, or suspecting for a moment that it is far

more honourable to work hard, as he does, in helping to provide an honest crust for those who are dear to him, than to be the boldest smuggler that ever had a valid claim to the galleys.

EMIGRATION TO IRELAND.

Soon after the abolition of the corn-laws, a good deal of attention was drawn to Ireland as a promising field for emigration. Famine had pitilessly dispossessed vast numbers of the population, and land, we were assured, was to be bought at as low a price as in New Zealand. The opportunity seemed a good one for small capitalists, notwithstanding that hints were now and then dropped as to the insecurity of life and property in the sister isle. Being myself one of this numerous class, I thought I would go over and see with my own eyes whether the prospect were as inviting as we had been led to imagine; so when my summer holiday came, I shouldered my knapsack, put on my wide-awake and stout walking-boots, railed it down to Liverpool, steamed over to Kingstown, and at five o'clock on a sunshiny morning first set foot in Ireland.

Much reading on the subject had, I fancied, fully prepared me for all that might come before me; but I was completely taken by surprise. Devoting the first three or four days to a sight of the picturesque beauties of county Wicklow, I rambled from the Dargle to Luggelaw, the Seven Churches, the Devil's Glen, and other famous scenes, choosing highway or byway as best suited my inclination. But what a contrast between nature's handiwork and man's! To see such squalid villages within twenty miles of the capital was more than I was prepared for; and the wretched groups of buildings and ill-fenced enclosures, which it seemed a mockery to call farms; and the more wretched implements—harrows without teeth, carts with two old wheels, and those ungroomed; and the most wretched population, ragged, dirty, indolent; and the swarms of beggars, looking more dead than alive, no speculation in their eyes, no hope, no vigour; their clothing a screen of tatters, compared with which the *Kaross* of the Hottentot is a regal robe: never could I have pictured to myself such a state of humanity. A five years' residence in America had, I thought, familiarised me with miserable aspects in occasional glimpses of backwoods' farms and settlements; but they are smiling and lovely in comparison with what one sees in Ireland. Abjectness everywhere prevails. On the highroad, within a few miles of Kingstown, I saw two little bare-footed boys staggering along, carrying a bundle by a stick on their shoulders, and a few ragged people straggling by their side. The bundle contained a child's corpse, and the party formed a funeral!

Could it be worse than this, I said to myself, in Connemara? The question would perhaps be answered in a few days. Leaving Dublin, I travelled to Parsonstown for a peep at Lord Rosse's monster-telescope, and on to Athlone, where I caught the mail for Galway. I thus obtained a view of the country from east to west. The sight of Roscrea, where we stopped to change horses, struck me dumb for a time, till the exclamation burst from me: 'What a miserable town!' You marvel how all the idle people live, of whom so many stand listlessly about, as though life had no purpose, or starvation no horrors. Cloghan was, if possible, more miserable, and Athlone itself not particularly inviting. It seemed preposterous to remember, that one reads of spirited contests in such places for the election of members of parliament. In the outskirts of Loughrea, a whole street of doorless, windowless, and roofless cottages offered a melancholy specimen of eviction on a large scale. The ride, on the whole, was far from pleasing, for great part of the interior of Ireland is unmitigatedly

ugly: the pretty country lies among the hills, which rise all round the coast, and form, as it were, a rim to an inner region, which, though undulating in places, is so generally level, that the Shannon, except at one or two parts of its course, scarcely knows which way to flow. To walk over such a country would be weariness indeed! One feature was, however, too striking to be overlooked: it was, that cultivation, even on the rude holdings of the peasantry, appeared to yield an ample return in the form of luxuriant crops.

I took a diligent survey of Galway; it is a task which repays a thoughtful observer. The hotel struck me as characteristic: dirt and disorder, doors that would not stay shut, windows that would not open, bells that would not ring, and a huge, gaudy ball-room. The frequenters of the house must have an extraordinary capacity for drinking, for it seemed scarcely possible to get even a tencup that held less than a quart. In pursuance of my practice of conversing with anybody and everybody, I had a talk with Mr Croker, the bookseller, touching the demand for literature. He told me that he had come to the town nine years before, from having read in Ingli's work that 20,000 people were existing in Galway without a bookseller. For the first two years, it was very uphill-work, as he had to create a taste for reading; but now he has a good trade, and a large shop with a well-selected stock of books; so we may hope that the capital of the west has left the dark ages behind for ever. The new college ought to do something for it.

Here my work began in earnest: I walked from Galway to Oughterard, the broad expanse of Lough Corrib, on my right, enlivening what, without it, would have been a dreary landscape. Arabia Petrea cannot surely be more stony! At all events, it cannot shew that constant succession of ruined cabins and cottages, and abandoned farms, that meet the eye on both sides of the road along which I journeyed. Many had been rendered tenantless by the famine, and more by eviction. No curling smoke rose through the air, no sound of cheerful voices came to the ear, no sheep browsed on the hills. It was as though a conqueror had passed over the country, leaving nothing but death and desolation behind.

At Oughterard, I had some hours' conversation with Mr Robinson, the manager of the great Martin estate of 200,000 acres, now in the hands of the Law Life-Assurance Company, who have a claim on it to the amount of £190,000. He was very communicative, and informed me, that when he first took the management, no books had been kept for five years; he evicted every tenant, and relet the holdings, taking care to open an account with each individual. Thirty acres of arable land, with three or four of bog, and a few square miles of mountain as sheep-runs, let for £5 a year, with an addition, at that time, of 5s. in the pound poor-rates. Notwithstanding the severity of his measures, he visits even the most lonely parts of the estate without apprehension of danger. 'The people know,' he said, 'that I am willing to help them that help themselves. Look here,' he added, taking a handful of keys from his pocket, 'I ejected twenty families this morning from a town-land of 200 acres, all well cropped. They made a great outcry, but I turned them out, and locked the doors; and you may take my word for it, that in a day or two they will come to me and pay the year's rent and costs of the ejectment. I am used to that sort of thing. They never would pay if you didn't make them.' It was clear that a favourable opinion of the natives was not to be expected from Mr Robinson; long experience, he added, had convinced him, that one English labourer at 2s. 6d. a day would do more work, and better, than four Irish labourers at 8d.; and even then, the four would need a fifth to oversee and keep them to their task. But with all their indolence, they exhibit a degree of tact and shrewdness rarely shewn

by the English peasant, and they are quick to discover and play upon the weak points of their employer, fooling him at times to the top of his bent.

Oughterard presented an unusual scene of bustle, as the quarter-sessions were being held, and several cases highly interesting to the neighbourhood were to be tried: one, especially, in which the collector of poor-rates was implicated. Were I to narrate all that I heard of this man's tyranny and illegal exaction, it would not be believed; and had not the evidence been too universal and conclusive to admit of doubt, I should have deemed it incredible that such deeds could be committed within a thirty hours' journey of Westminster Hall. The whole case was but a confirmation of a fact which it is impossible to be blind to in Ireland—that whatever may be said about governmental error or malice, the Irish are their own most fatal enemies.

The route from Oughterard to Clifden traverses the Martin estate, and the wild and picturesque scenery of Connemara. Apart from striking combinations of landscape, the prospect is dreary, and an oppressive sense of desolation comes over the mind on witnessing the signs of neglect and abandonment, the want of life, for sheep or cattle are rarely seen on the hills. The absence of live-stock is accounted for in two ways: one, that the country has not yet recovered from the effects of the famine; the other, that those who possess animals fear to turn them out, because of the depredations of the 'havockers,' as the subordinates of the poor-rate collectors are named. It is no uncommon practice for these officials to seize the sheep from farms on which they have no claim, for the rates of others that are indebted. There was, however, something that relieved the dreary aspect: the patches of cultivation, though few and capable of improvement, were such as to indicate a fertile soil—one that would make a generous return for the labour bestowed on it. Even the little plots, around the miserable cabins, shewed that cultivation would not by any means be thrown away. I noted these things narrowly, for it was from them that I was to form my opinion as to the expediency of seeking a new home in Ireland. The weather, too, was another consideration; and in this respect, the prospect was not inviting; it seemed to me that the sudden and frequent appearance of raw cold mists, accompanied by violent wind, would prove extremely unfavourable to agriculture.

The landlord of the hotel at Clifden abundantly confirmed all that I had heard concerning the oppression and extortion of the collectors; and as he was deputy-chairman of the Union, his testimony may be received as official. On the other hand, he believes the people around him to be essentially honest, though the famine has to some extent shaken their principles; as a proof, he mentioned that the back-door of his house was never locked or bolted at night. And it is well known that the humbler classes of Irish, especially the women, are free from the vices which characterise similar classes in England. As for myself, though companionless, I felt no apprehensions either in the solitudes of Connemara or the wilds of Mayo.

On toiling up the steep hill at the extremity of Letterfrack Bay, I saw a garden with paths suitably traced, and well kept. A few yards further, stood a neatly-built house and shop, where a little of everything might be bought, including *Cadbury Brothers'* chocolate, as indicated by the label in the window. The occupant was a worthy member of the Society of Friends, whose uncle, Mr Ellis, lives on the opposite side of the road, in a house which he built for himself, in a pleasant spot, commanding an extensive prospect. Four or five years ago, the place was all wild mountain; now, considerable portions of it are dug and drained, and levelled as far as the formation of the surface will permit; while, immediately in front of the house, a smooth green lawn and shrubberies add a charm to the

residence, in striking contrast with the savageness around. Mr Ellis was a manufacturer at Bradford, in Yorkshire; but benevolent views, and a desire to try the effect of a moist climate on an asthmatic member of his family, led him to remove to Connemara. His estate comprises 1000 acres, which he holds at 2s. per acre on a perpetual lease; and he employs about 100 labourers, of all ages, at from 4d. or 6d. a day, to 4s. 6d. a week. The working-hours are from six to six, with an hour's intermission at nine for breakfast, and half an hour for dinner, at two. His chief produce is root crops—turnips, mangel-wurzel, and potatoes; the first in prodigious quantities. The climate is unfavourable for grain; it is almost impossible to grow wheat, and such crops as are raised do not ripen till October—six weeks later than in England. The appearance of the estate is an encouraging proof of what can be done by spade-labour; the improvements, however, though great, have not as yet proved remunerative; a sufficient reason why a man with small capital would not succeed. This being the case with a place well situated for obtaining sea-wrack and sand at little cost, it affords a datum on which to form an opinion of land situated at a distance from the coast. Whatever may be the result to the benevolent Quaker, it cannot fail to benefit the people of the neighbourhood. 'We must have starved to death,' said one of the labourers to me, 'if God hadn't sent Mr Ellis to keep us alive.' The benefactor considers the mind, too, as well as the body, for he has built a school, in which some sixty or seventy boys and girls are taught by an English master and mistress, and in which Catholics and Protestants mingle together, as doctrinal matters are not included in the course of instruction. It was a heart-cheering spectacle; but when I remembered at what a great outlay it had been produced, I felt less hopeful of accomplishing anything satisfactory with narrow means.

The hotel at Kylemore is kept by the Rev. Mr Duncan: he told me that, six years prior to the time of my visit, the place where his house stands, and all the reclaimed land behind it, was in a state of nature: its altered appearance shewed what might be expected from cultivation.

I entered Kylemore with a blue sky and bright sun; but before I left it, the weather changed; dense clouds came over, accompanied by thick mist, which changed to furious rain. And the wind blew as it can blow only in the west of Ireland, or the Scilly Isles. Now I understood why trees were so few, and why those few were bent almost double, their scanty heads stretching as far as possible away from the fierce north-west blasts; and now I had no difficulty in believing that the sea-spray is drifted twenty miles inland, where it may be tasted on the windows facing the wind. And then, when I was kept prisoner a whole day by unmitigated rain, in what is called the hotel at Leenane, I felt more and more doubtful about buying land in Ireland.

Impatient to escape, I left Leenane early the next morning for Westport, intending to breakfast on the road; but I had overestimated the capabilities of the region. About half-way stood what had been described to me as an 'illegant hotel': it was a miserable cabin, without a chimney, and with PAT HOBAN, *licensed to sell Spirits, and Entertainment*, rudely scrawled on a board over the door. I looked in: dirt was everywhere; a pig lay on the hearth; two children lay on the pig; while a cock, two hens, and a duck, stood looking very unhappy in the middle of the floor. Travellers must not be overfastidious, and I thought bread and milk might be ventured on; but there was none but oat-bread; and as I cannot eat that, even when hungry, I had to go on without breakfast; and after walking seventeen Irish miles (twenty-one English), I reached Westport with a keen appetite. A labourer on the way kept me some time in conversation, and was very pressing in his entreaties to have his name

set down in my book as a candidate for employment on my farm—if I should buy one. 'Sure, yer honour,' he said, 'it's yerself, and the likes of ye, that we are wanting here. Och! if the English would but come over and buy the land, 'tis they'd make work plenty, and give fair wages.' I had heard the same from labourers in Wicklow, and every county through which I had passed; and the experiences of others prove the sentiment to be genuine.

The hotel at Westport is one of the best, if not the best in Ireland; and here I fell among a number of tourists and travellers, many of whom had come over with objects similar to my own. There was naturally a general exchange of notes, and as it happened, with very little disagreement in the results. 'Have you read the *Saxon*?' was every one's inquiry, thereby meaning *The Saxon in Ireland*—an interesting volume, which was a good deal talked about for some time after its publication. Those who had read it were in the majority; and it was amusing to hear the comments that fell from one and another on the highly-wrought descriptions in the book as compared with the reality; and some of us doubtless felt much as George Robins's innocents did, who, were lured by his glowing imagery some twenty miles from town, to 'view' one of the paradises which it was so often the good-fortune of the matchless auctioneer to be 'instructed' to sell. I had been much impressed, when reading the work, with the author's interesting account of his first settlement and house-building at Ballycro, particularly with the imitation and restoration of a room from the dear old house left behind in England; and I asked one of the party who had been to the spot, whether he saw the house, and what it looked like. Much to our astonishment, he replied that this rather touching story was a pure fiction: there was not only no house, but no land—that is, belonging to the *Saxon*; for he had sold it all, and seemed to have no other occupation than to journey frequently between Mayo and London, and sell Irish estates. We came, therefore, to the conclusion, that the *Saxon in Ireland* was a remarkably clever advertisement, and that Mr Ashworth, the author, had made out his case with considerable ingenuity.

At Westport, a goose can be bought for 1s. or 1s. 6d.; turbot, from 2s. 6d. to 5s.; trout and salmon, from 4d. to 6d. per pound; and land, for miles round the neighbourhood, may be had for from 10s. to 20s. the acre. It would thus seem easy to settle down, and live at small expense. But the cost of reclamation would have to be taken into the account—to say nothing of the isolation, of the distance from markets, and the labour to be expended in obtaining supplies.

These facts were more and more impressed on me as I pursued my journey through Newport to Achill. In going along, I caught a distant view of the place where the *Saxon's* house ought to have stood, but there was not the slightest sign of a building of any description, which so far confirmed what I had heard at Westport. The roads here, as everywhere in Ireland, are excellent; the weather was as fine as could be desired; the scenery, a striking succession of mountains and undulating plains. Here was the very land of promise, and I considered it well; but when I saw the state of the crops, even where evident pains had been bestowed on the cultivation, and noticed the precautions taken to prevent edifies and produce being blown away by the winds, which for eleven months in the year sweep across the county with more or less violence, I felt that, to buy land in this part of Ireland, would be a waste of capital and labour for one who, though willing to work, did not wish for the prospect of harassing and wearisome labour with that of a future home. In some places, whole fields of potatoes and patches of grain were turned quite black by the fury of the wind, that had been blowing for the previous two days; and if it were so in July, what

must it be in September or March? May, indeed, is the only month of the twelve not overdone with wind.

Before leaving Achill, I climbed to the top of Slieveamore, and sat for a long time under shelter of a crag on the summit, contemplating the magnificent prospect. On one side rolled the broad Atlantic, stretching to the west; and before me lay the whole island, backed by the wild regions of Mayo and Erris, forming a picture where green slopes and valleys were strangely mingled with dreary brown wastes of heath and bog, broken by swelling hills or rocky ridges. Blacksod Bay and the numerous inlets gleamed like silver in the sunlight, and the shadows of the clouds, as they floated past, looked like dense forest-patches amid the verdure. Scarcely a tree was, however, to be seen in all the landscape—a fact which ought to have weight with those in search of a home, as well as with admirers of the picturesque. The only sign of life was in the village—the Protestant colony—at the base of the mountain, and in the surge that broke solemnly on the smooth sandy beach. It was a beautiful, a glorious prospect; but I came down from the hill, determined not to seek an abiding-place in that part of Ireland.

I could add many particulars concerning my subsequent travel to Sligo, Londonderry, and round the Giant's Causeway to Belfast, but must hasten to a conclusion. The result of my visit was favourable to emigration to this country, great in latent resources. The determination of large numbers of natives to quit Ireland for America, appears to leave vast tracts open for the settlement of enterprising men. Properly managed by new-comers, the 'green isle' will become a profitable pasturing region for vast flocks and herds. Already, there is an import of live-stock, wonderful in amount. On good information, I learned that as many as half a million of Scotch sheep are brought over every year, for the sake of breeding; and of course, in a few years hence, the tide will turn, and mutton and wool to an immense extent will be shipped to England. To all appearance, Ireland is destined to be a kind of Australia to Great Britain—a great pasturing country, with the advantage of being at the very doors. Fully alive to this fact, and stimulated by the present high price of butchery, considerable numbers of English and Scotch farmers have entered on leases of land, and brought skill and capital to bear on what was formerly under the poorest process of tillage. To persons of moderate means, it might be advantageous to lease or purchase land in one of the central counties, not far from a railway, and devote themselves to the business of supplying the English markets with eggs, poultry, and beef. No doubt, difficulties in this or any other kind of farming require to be encountered; but among these cannot now be reckoned the ill-will of the native population. The Irish are an industrious and well-disposed people *when properly treated*, and will readily give a fair day's work for a fair day's wage. Shame on those who, by maltreatment, have caused them to go in quest of subsistence beyond the Atlantic!

Whatever Ireland once was, and notwithstanding the squabbles which are still associated with its affairs, it is very certain that it is a rapidly improving country, and that principally by the sale of land under the Encumbered Estates Act. From the first operations of this act, in February 1850, to August 1852, more than 2000 petitions have been lodged for the sale of estates, and more than 2000 conveyances executed: 4062 lots had been sold to 2455 purchasers, by which the former number of proprietors has become trebled, and 1,000,000 acres—about one-twentieth of the island—has changed hands. The proceeds of the sales amounted to £7,000,000. The greatest quantity of land sold was situate in Galway; among the buyers were 106 English, 8 Scots, 1 American, and 1 Anglo-Indian from Calcutta. Of these, 58 were from London and its neighbourhood, and 11 from

Lancashire; 52 may be classed as gentry, 36 are manufacturers, and 20 farmers. It thus appears that professed agriculturists have not been the largest purchasers. Capital has been invested, with a view to a profitable return; and at present, I know of no part of the British Islands where money can be more advantageously laid out in the acquisition of heritable property.

THE PIN-HOLE.

AMONG the many traditions held in reverence by the descendants of the Lady Mary Chobham, there is one of peculiar interest.—The afternoon of an unrivalled summer day was verging towards evening; long shadows were cast on the turf; a gentle breeze stirred the thousand leaves overhead, and rippled the surface of the river Wear, which, ponded back, formed the really magnificent sheet of water that constituted one of the chief ornaments of Wearscote, the ancestral domain of the Chobham family.

A pleasure-boat, into which the dripping oars had only recently been drawn, rocked on the bosom of the lake; and on a rustic seat on the margin sat two young people, who had been loitering away the whole day in a state of entire felicity. The Lady Mary was at that time not more than fifteen, and rather childish in appearance, with long fair hair flowing in infantine carelessness and grace, clear delicate complexion, large eyes that sought the ground; the whole contour hardly giving promise of that exquisite loveliness which in after-days shone unrivalled in the court of George III. Her dress was that of a child—a simple white frock, with a broad blue crape sash; a comfortable German bonnet, with its deep tippet or cape.

The young girl was slightly thrown back on the seat; and whilst her companion held her left hand, the right was busily engaged in forcing the gold pin that had fastened her sash in and out of the hard oak arm of the park chair. This she did in a sort of unconscious manner, though every now and then the blood would rush into her cheeks, and her efforts become almost spasmodic. With infinite difficulty, at such times, a speck of wood might be forced out, almost big enough for the cricket-ball of a mite. Perseverance, however, did much, and the pin-hole attained more and more of a respectable depth and shape. The young man by the Lady Mary's side was in reality not much older than herself; but the hardships of a seafaring life, the constant change of climate, and the real service he had already seen, gave him an appearance of age and manliness. He had entered the navy at thirteen, and was now enjoying a short leave of absence. Dressed in the stiff uniform of the service, Arthur Townsend had no adventitious advantages; but if you looked in his face, its high resolution and great mental power shadowed out the future companion of Nelson and Collingwood. You might almost have read his part in Trafalgar. And now he was warming with the subject most interesting to him; and that voice of singular sweetness, destined 'to shout amid the shouting crew,' was telling to earnestly attentive ears, of moonlight watches on the tideless Mediterranean; of stormy conflicts in the Bay of Biscay; ay, and of the cannon's roar—of conflict, and death, and victory. The Lady Mary, with head declined, and little hand working diligently with the gold pin, listened with breath almost suspended to the account of the gallant and successful defence of Gibraltar: she seemed to see the red-hot balls as they fell on the enemy's ships and batteries; and the flush on her cheek came and went more rapidly as the narrator described the daring deeds, the moments of peril, as the victors braved everything to rush to the rescue of their baffled foe, maddening and perishing in their burning ships, no longer considered as enemies, but as suffering fellow-creatures; and her heart

swelled within her as she instinctively recognised, felt, through the little that was indicated, how large a share the narrator had in these events. And then Arthur Townsend described softer scenes: coral islets formed under sunny skies, where the flamingo was wading in the still lagoon, and the palm-tree saw its feathered top reflected; scenes of quiet beauty, like a still evening after a stormy day; and the cheek grew clear and pale, and the wonder-working little hand rested; but in these communings, there was no talk of self.

Night had crept round, and finally closed over Wears-cote; the morning hours were even approaching, but still Lady Chobham meditated in her library. Living in courts, the intimate friend of politicians, acute and far-seeing in all things, the aspect of public affairs filled her with anxiety. There were discontent and disunion at home; abroad, the nations were still staggering under the effects of the French Revolution; the course of Bonaparte was beginning. Nor was she insensible to the dangers attending the career her gallant young kinsman had so well begun. On the morrow he would depart. When, how should she see her sister's son again? Now she considered the two children were at rest; hours had passed since their bright unthinking good-night. She was roused by a most unmistakable step—one acquired only by those whose walk is over the unsteady waters; and young Townsend entered. There was neither hurry nor anxiety in his manner, and the strong will suppressed all emotion. Quietly, respectfully, he told his aunt that he loved the Lady Mary, and that he intended to marry her. There was great feeling; there was earnest purpose; there was nothing ridiculous in the declaration of the boy-lover. He rather expressed his conviction of what would be, than asked sanction or assistance.

Lady Chobham was, to say the least, greatly puzzled; she thought the proposition absurd—its probabilities small. The youth was entering on a life of difficulty and danger; years might elapse before he would see his native land again; and then, would he be a match for her child? Rank, fortune, were alike inadequate. The mother's eye foresaw the splendour of womanhood into which the young girl would develop; she did not underrate her great advantages of wealth and connection; and here was a sailor-boy almost claiming her. She looked up: in the calm clear eye, the self-reliant ample brow, the hero stood revealed; she doubted not his future or his destiny. He might die; but, living or dying, every one connected with him would be ennobled. The fulfilment of his hope was unlikely, but she would not send her sister's child away in sorrow.

'Arthur,' she said, and eye and lip quivered; 'my child is happy in your love; hereafter you will understand more of her worth, her position, and its requirements. You must entirely deserve her; till you do, do not attempt to win her. I have but one stipulation: no word of what has passed between us must disturb her peace, until you can become her husband.' Strange word to a boy of sixteen, stranger still that it did not seem incongruous; and he accepted the terms. Long before the rest of the world was stirring, he again visited the seat by the river-head, and made prize of a small portion of a blue crape sash that had been left waving in the breeze; and by sunrise he had joined his ship at Portsmouth.

The Lady Mary returned to school. It was observed that for some time she paid marked attention to her geographical studies; and walking her measured pace round the dull London squares, her thoughts were often on the broad Pacific, or coasting the Mediterranean. Time passed on, and these things faded. With a delicate refinement, she stood the acknowledged beauty of the day. But she lived in stirring times, and hers was no spirit that could live for itself alone. In all the daily occurring public events, she took an absorbing interest. Suitors came and went: she

never seemed to have any but kind and gracious words of refusal to give them. She could not account for it herself. From time to time, she read with interest, but without emotion, the glowing descriptions of Arthur Townsend's prowess and rewards. She saw his name coupled with all that her country valued and honoured, and she felt glad and proud that she was related to him. Twice he had returned, and they had met with pleasure and unreserve on her part; but they had never been at Wears-cote together again. And still more years passed, and with them came sorrow: her mother did not live to see the end of the romance. And now even that trial was over; and at five-and-twenty, the Lady Mary was in the possession of great wealth, every personal charm in full perfection, but still wandering, fancy free, by the side of the river at Wears-cote.

And again it is a summer evening, and again the Lady Mary is sitting on the chair by the side of the lake, and again, earnestly, respectfully, by no mean cavalier, is a suit she has often heard before urged on her. The affections of the Lady Mary are disengaged; she almost fears it is selfish to feel so indifferent; ought she not to give some encouragement, some hope? She wavers in her refusal; assuming the same attitude in which she had listened to another voice ten years before. Her eye rests on a small speck in the arm of the chair; a crust of paint has been recently rubbed off; and with a sudden rush and bound backwards, memory takes in the whole scene when that small hole was nervously bored. All the very words then uttered come back, and with them a feeling that she dare not accept or encourage any offered love.

True to his promise and to himself, Arthur Townsend returned. His country paid, in wealth and honours, part of the debt of gratitude she owed him. He met the Lady Mary on equal terms: how he sped in his wooing, is matter of history. In an old cabinet, a small piece of oak, delicately perforated, and wrapped in a portion of blue crape, was found, and then this imperfectly-told little story came out.

ENGLISH GARDEN-FRUIT.

THE pear and the apple tree, now coming into blossom in the great orchards of England, and filling the eye with beauty, may be said to be the most truly national of our fruit-bearing plants. Both are of the same genus, that called *Pyrus*, and belong to the natural order Rosaceæ, forming a part of the fifth section Pomeæ. As the history of these two divisions of this genus for a part of their course runs parallel, we will for a time speak of them together, and hereafter take up those points on which they differ.

The fruits of all plants of this tribe are called pomes, as we have seen that of the stone-fruits to be drupes, and of the bramble and some others bacca, or berries. The structure of a pome is very different from that of either a drupe or a berry. It is the tube of the calyx grown fleshy, including within it, and forming one body with, the carpels, which are usually five, with bony or gristly walls, enclosing one or more seeds. Around this seed-core is a mass of cells, which, if you place a slice under a microscope, present a beautiful appearance as their juicy and shining contents burst from them. These contain the acids, saccharines, and other matters which give their peculiar flavour to the fruit; and at the margin is the rind, which formerly was the cuticle of the calyx. So far the general features of both fruits are alike; but there is a difference in the arrangement of the cells which form their substance; and in the pear are deposited some particles of gritty, stony material, called by Grew 'tartareous knots or grains,' which are not found in the apple. Most of these are round. They are thinly scattered towards the outer part of the fruit,

but by degrees grow closer together; and towards the centre of some pears, cohere so closely as to form almost a stony core; and thus, as Grew says, 'the pear is nature's preface or introduction to the plum.' The exceeding beauty and regularity of all these cells and tartarous knots is very striking.

Both the apple and the pear appear to have been cultivated in very ancient times, and to have been held in great estimation. In the Canticles, it is said: 'As the apple-tree among the trees of the wood, so is my beloved among the sons.' Pliny speaks of some apple-trees which yielded more profit to their owners than a small farm, and mentions twenty-nine kinds as cultivated in Italy about the beginning of the Christian era. The pear is named by the earliest writers as abounding in Egypt, Syria, and Greece, where it was dedicated to Minerva. Trees of both species live to a great age; though the pear, from being less the prey of insects, and from other causes, is said to outlive the apple. An authority quoted by Evelyn gives 900 years as the probable term of an apple-tree's life—300 for growth, 300 for standing, and 300 for decay. Such calculations cannot of course be accurate, but they may approach the truth.

The pear (*Pyrus communis*) grows wild in woods and hedgerows in some of the counties of England, especially in Sussex, Somerset, and Devon. It is a tall slight tree, of very elegant appearance. The blossoms, which grow in lax clusters, are of snowy whiteness, wholly untinged with any colour; the leaves of a fine green, deeply and doubly serrated, and of a very peculiar form. The branches are armed with strong spines, more than two inches in length, and proportionally thick; an appendage of which all cultivated species are wholly devoid. Gerard's account of this tree is quaint and graphic; he says, it is 'great upright, full of branches for the most part pyramides-like, or of the fashion of a steeple, not spread abroad, as is the apple or crab tree: the timber of the trunk, or body of the tree, is very firme and solid, and likewise smoothe; a wood very fit to make divers sorts of instruments of, as also the haftes of sundrie tooles to work withall; and likewise serveth to be cut into many kinds of moulds, not only such prints as these figures are made of [namely, the curious plates which adorn his herbal], but also many sorts of pretty toies for coifes, brestplates, and such like, used amongst our English gentlewomen.' He gives us the names of six varieties, which, if I repeat them, will, I fear, not lead my readers to a very covetous desire to partake of such delicacies. They are, the 'great choke-peare' (*Pyrus stragulatorium*), the 'small choke-peare,' the 'wild hedge-peare,' the 'wild crab-peare,' the 'lowsie wild-peare,' and the 'crows-peare.' He says: 'In taste they differ among themselves in divers points—some are sharpe, sour, and of an austere taste; some more pleasant; others harsh and bitter; and some, of such a choking taste, that they are not to be eaten of hogs, and wilde beasts, much less of men.' Yet, as of rude and uncultured nations of men have sprung some of the most civilised which now adorn the face of the earth, so of these rough and choking pears are produced all the rich and juicy fruits of that name which now exist in our land; fruits which far exceed the luscious dainties of India, and would be prized above any which flourish in eastern lands, if they could there be brought to perfection. But it is in temperate climates alone that these valuable trees attain any luxuriance, or their fruits any flavour. How early the pear was cultivated in England is not known; but it is probable that it was before the time of King John, as there is a tradition that he was poisoned by a dish of pears presented by the monks of Swinsted. There is an entry in an account-book of Henry VIII., 'to a woman who gaff the kynge peres, twopence;' and in old writers we often hear of 'wardens' and

'warden-pies,' which was the more common name for pears. They were formerly considered to be an antidote against the poison of 'venomous mushrooms;' and also a drink of perry to be good against a surfeit of mushrooms.

We have seen that the wood of the pear-tree is valuable for many uses. In Persia, where the religion, which is Mohammedan, forbids the use of gold or silver utensils for table-service, this wood is employed to make very beautiful spoons. The leaves afford a yellow dye, and may be used to tinge cloths of a blue colour with green; but the great value of the pear consists chiefly in the richness and excellence of its fruit for the dessert, and in its expressed juice, which makes that very delicious beverage called perry, which is still made in the cider counties of Hereford and Worcester, though not now in so great quantities as formerly. Worlidge, a writer of the seventeenth century, says that there was a pear-tree growing at Ross, in Herefordshire, in 1675, that was 'as wide in the circumference as three men could encompass with their extended arms; and of so large a head, as that the fruit of it yielded seven hogsheads of perry in one year.' Worcester, Hereford, Somerset, and Devon, are the prime cider and perry counties of England. The perry is, however, chiefly made in the two former; and much both of that and of cider is exported to the West Indies and America, as also to India. The pear often yields fruit in years when the apple fails, but both produce very uncertain crops; and the difference between a good and a bad apple year is often the difference of several hundred pounds more or less to the cultivator. The arms of the city of Worcester are argent a fesse between three pears sable.

Of the flavour of the wild-apple, or of its attractiveness as an article of food, alas! we can say but little. *Pyrus malus*, the common crab, is the only apple indigenous in England, and the fruit it bears is of a most harsh, austere character. Cultivation entirely alters the character of the apple. It seems probable that this fruit was cultivated in England by the Saxons, if not even at an earlier period by the Romans. The finer kinds of table-fruit seem to have been of much later introduction. The pippin was 'brought from over seas' in the reign of Henry VIII.; although Shakespeare, by a little anachronism, makes Justice Shallow say: 'You shall see mine orchard, where, in an arbour, we will eat a last year's pippin, of my own grafting;' and again, in the *Merry Wives of Windsor*: 'I'll make an end of dinner; there's pippins and cheese to come;' the times of these plays being more than a century earlier. The cider orchards began to be planted in the reign of Charles I. Evelyn, in his *Sylva*, earnestly presses the superior advantages of the culture of cider-fruits in preference to hops. 'It is little more than an age,' says he, 'since hops (rather a medicinal than alimental vegetable) transmuted our wholesome ale into beer, which doubtless much altered our constitutions,' &c.; and afterwards: 'It was by the plain industry of one Harris (a fruiterer to King Henry VIII.) that the fields and environs of about thirty towns in Kent only were planted with fruit, to the universal benefit and general improvement of that county to this day; as by the noble example of my Lord Scudamore, and some other public-spirited gentlemen in those parts, all Herefordshire is become, in a manner, but one entire orchard.' The best apple-gardens in England, more especially those of the cider districts, have been observed by geologists to follow the tract of red sandstone which stretches across the island from Dorsetshire to Yorkshire; in Ireland, the best orchards are on limestone gravel; and in Scotland, there are few that are not on some soil more or less calcareous. A good apple year is a season of great profit to apple-growers, but it is also one of a most demoralising tendency to the poor, for the cheapness of cider, their favourite beverage, leads them in many cases to indulge

in it to excess; and many a drunkard may trace the beginning of his downward course to a time when his want of self-denial led him to abuse God's gracious gift of plenty to his own disgrace and ruin, and to commence a habit which it is easier to begin than to lay aside. I remember one year in which apples were so abundant, that the coopers could not supply casks to contain the cider, and tanks were made to hold the surplus quantity of liquor, which flowed in streams from the glutted presses. In that season, heaps on heaps of fruit lay beneath the trees till after Christmas, from deficiency in the number of hands and instruments needed to bruise and prepare them, so that the whole air was impregnated with the heavy smell of apples, which in many instances produced disease; and good cider was that year sold at the Ring's Mouth—thus the press is provincially termed—as low as half a guinea a hog-head. The quantity of apples required to make a hog-head of cider, is from twenty-four to thirty bushels; and in a good year, an acre of orchard will produce somewhere about 600 bushels, or from twenty to twenty-five hog-heads.

In Somerset and Devonshire there are customs of ancient date connected with apple-trees. In some places, they are observed on Old Christmas-day; in others, a few days later; and although they slightly vary in different places, yet in main points they agree. The farmer whose orchards are to receive the benefits of the ceremony, gives a grand supper; then, at about ten o'clock (or, in some places not till twelve), men, women, and children, adjourn to the scene of action, in some districts carrying with them cider in buckets, with roasted apples floating in it, with which the trees are pelted; in others, this part of the ceremony is not observed, but a supply of bread and toasted cheese is carried into the orchard, and all the party assemble under one of the best apple-trees. A boy is then seated on the branches, and cries out: 'Tit-tit—More to eat!' representing the character of a tomtit; on which they hand up to him some of the bread and cheese and cider. The whole party, who are supplied with little cups, then stand round the tree, and sing:

Here's to thee, good apple-tree,
To bear and blow apples enow,
This year, next year, and the year after, too:
Hatfuls, capfuls, three bushel in bagfuls,
And pay the farmer well.

They then drink round, and fire a salute to the tree, making all the noise they can with pistols, old blunderbusses, or other firearms; or failing these, with explosions of gunpowder, placed in holes bored in pieces of wood, accompanying their salute with loud cheering, and firing at the branches of the apple-trees. In some neighbourhoods, a libation of cider is poured out at the root of the tree, but this is not invariable. The party then again stand round, and, with another cup of their favourite cider, sing, as a concluding toast:

To your wassail, and my wassail,
And joy be to our jolly wassail.

This custom is called wassail, and the people speak of meeting to 'bless the apple-trees.'

We have left but little space for the remaining species which are classed under the head Pomace, and must therefore but glance at them. They consist of the quince (*Cydonia vulgaris*), and but few others. The quince is scarcely to be considered indigenous in England, but, nevertheless, it grows wild, and abounds in some parts of Sussex. The fruit, which is of much the same form and structure as the apple, is considered to have medicinal qualities; and of it wine is made, and a sort of marmalade, which by some people is much liked as a flavour to the apple in pies. Some old writer says: 'Marmalade of quinces is tooth-

some, as well as wholesome, and therefore I cannot blame such gentlemen who are seldom without it in their closets.' But however that may be, the strong natural scent and taste of garlic which impregnate the fruit, prevent it from being a favourite with many. There are also some varieties of the service-tree (*Pyrus sorbus*), and one of the *meuspilus* or medlar, which, with haws and a few other unedible fruits, close the catalogue of British pomace. The fruit of the service-tree, which, like the medlar, is considered fit to be eaten when in a state of partial decay, is a very pleasant subacid fruit. It is a rather large tree, with seven-lobed serrate leaves, and bearing loose terminal tufts of white flowers, which produce bunches of somewhat pear-shaped berry-like pomes. These are ripe about November, and are then sold in the markets, though they are gathered some weeks before they are ripe. They are a treat to children and the poor, as a large bunch may be bought for a half-penny, and the flavour is very agreeable. It is a custom at Kindford, in Sussex, and probably elsewhere in that county, for a damsel who wishes to encourage the attentions of a suitor, to hang a bunch of this fruit in her chamber-window, as a token that he is accepted.

NAMES AND FORTUNES.

THAT there is a connection between the name and the fortune no author will doubt—and certainly no publisher; since a captivating title is admitted by all to go a great way in launching a new book into profitable sale. The inventors of new shirts, razors, patent medicines, and many other things in this struggling, striving, competing world, know well enough what's in a name; and they shew that they do so by the long Greek compounds they adopt to signalise their commodities withal before the eyes of the multitude. And what husband does not prefer addressing the partner of his heart by some such gently-breathing appellative as 'Emily, my love,' to 'Grizzle, my dear?' But our hint at present is to speak of the names of ships, which would seem in many cases actually to prophesy their fate. We were once conversing with a military friend, now a general officer, who was giving us an account of Sir James Saumarez's failure in the Bay of Algeiras at the time our informant was at Gibraltar. The *Hannibal*, seventy-four, he told us, got on shore among the rocks under the batteries, and was obliged to surrender to the enemy; while the description he gave of her captain, who was ill in a fit of the gout, sitting on his chair upon the quarter-deck with his feet laid up, and storming at his crew in the midst of the deadly shower of shot that fell on all sides, was exceedingly graphic, and great were the narrator's lamentations at the disaster.

'How could it be otherwise?' said we coolly.

'Why? What do you mean?'

'Who could expect any other fate for a vessel with the ill-omened name of *Hannibal*?' was our reply. Our friend was convinced at once.

When Lord Nelson hoisted his flag on board the *Victory* there was not a man in the fleet who did not feel his heart twice as strong for battle—nay, that defeat was impossible under such auspices, for sailors are proverbially superstitious.

What was the ship in all the British navy which was destined to receive the surrender of that prodigy that had been breathing out the flames of war, and vomiting fire from the throats of his artillery throughout Europe for twenty years? Napoleon Bonaparte surrendered to the *Bellerophon*, the name of the hero so renowned in fabulous story, because at his feet the fire-breathing monster Chimera surrendered its powers—its flame-vomiting propensities from that time becoming extinct.

You remember that at the battle of the Nile the *Culloden* was the only ship that had no share in the triumph, as she got aground before the action, and did not get off till it was over. We cannot but associate this in our minds with Lucan's line describing civil wars: '*Bella geri placuit nullas habitura triumphos*,' for triumphs were never allowed at Rome to victories obtained in civil commotions. Now though the battle of Culloden was a great benefit to the kingdom, inasmuch as it put an end to civil strife and set the nation at rest, yet the blood which drenched that plain was the blood of Britain's own sons, and should be wept over as a necessary severity, not regarded as a name to be decked with the laurels of triumph, and as such used to give its prestige to a ship of war.

The first English man-of-war was named the *Great Harry*, the second the *Lyon*; and we may here observe, that the latter vessel was a capture from the brave Scotsman, Andrew Barton. Both these vessels were as fortunate as their names might seem to imply: the *Lyon*—the significant emblem both of England and Scotland—shared in the glory of defeating the Spanish Armada; the *Great Harry* was as renowned as our present gracious sovereign for being attended by fair weather; and it might be considered a good omen for the British navy, that no ill-fortune ever chanced to the first royal ships upon record. But the destiny of ships and monarchs was to experience a serious change in the next century. The unhappy Charles I., before the breaking out of the civil wars, built a noble vessel, and called her *The Sovereign of the Seas*. She was, we learn, 233 feet long, 48 feet in her main breadth, in height 76 feet. She bore five lanterns, the largest of which was capable of holding ten persons upright! She had eleven anchors, and was of 1637 tons burden. Her sides were curiously carved and painted in black and gold; upon the stern stood a figure of Cupid bridling a lion; upon the bulk-head, forward, were a group of statues representing the Virtues. This sea 'sovereign' shared a fate bearing an ominous similarity to that of her royal master: always victorious against foreign foes, she was burned by an incendiary while in dock.

The *Royal James*, named after James, Duke of York—afterwards the deposed James II.—was blown up in the great sea-victory over the Dutch, May 28, 1672, in Southwold Bay, on the coast of Sussex. In her perished the great Earl of Sandwich, 'who preferred deroting himself to death rather than set the example of deserting his ship.' We can scarcely avoid being struck by the strange coincidence between the fate of this ship and his from whom she took her name, and also between that of her gallant admiral and those who suffered and perished for the sake of the living 'Royal James'—beginning at Killiecrankie and ending at Culloden. And whilst we are speaking of ships named—as they so commonly are, and have been—after individuals (royal or loyal), we must not omit the bark *Raleigh*, fitted out and called after his family name by the great Sir Walter, and intended to assist his half-brother Sir Humphrey Gilbert in his North American researches. This vessel sailed with Sir Humphrey, and, we are told in the sad record of his fate, 'appeared to predict the fatal termination of the expedition by returning in less than a week to Plymouth, through a contagious distemper which seized on the ship's crew.' She was lost on a similar expedition to the one which hastened Sir Walter's most unmerited doom.

Under better auspices, 'glorious old Benbow' embarked in the *Benbow* frigate, his own vessel, in 1686, and in her laid the foundation of his future fortunes by one of the strangest deeds on record in the chronicle of the seas. We cannot refrain from repeating it, though, except inasmuch as the ship was a 'lucky' one, it is not strictly to the point of our subject. The

gallant little frigate was attacked in her passage to Cadiz by a Saltee rover of double her size, and made a brave defence. The Moors boarded her, but were quickly beaten back with the loss of thirteen men, whose heads Captain Benbow ordered to be cut off and thrown into a tub of pork-pickle. When he arrived at Cadiz he landed, accompanied by his negro servant, who carried the Moors' heads in a sack. He was stopped by the officers of the revenue, who desired to know its contents. Benbow answered: 'Salt provisions for his own use.' They insisted on seeing them; and on being refused, compelled Benbow and his man to go with them before the magistrates, who were then sitting not far off. The Spanish podesta treated the Englishman with great civility, told him he was sorry to be obliged to make a point of such a trifle, but that the sack could not be permitted to leave the custom-house without having been inspected. 'I told you,' said Benbow sternly, 'they were salt provisions for my own use. Caesar, throw them down upon the table; and, gentlemen, if you like them, they are at your service!'

The Spaniards were surprised and startled as the ghastly trophies rolled before them, and eagerly asked their history. We may suppose the recital was made willingly, as one can divine no other motive for Captain Benbow's whim than that of making the action public, unless, indeed, the whole affair was a mere seaman's frolic. Its consequences were momentous, however, to him. The magistrates sent an account of the whole matter to the court of Madrid, and Charles II., then king of Spain, desired to see the whimsical 'sea-captain.' Benbow went to court, was received graciously, and dismissed with a handsome present. Charles of Spain also wrote in his behalf to King James II., who, on his return, took him into his own service; and thus he exchanged the lucky little *Benbow* for a ship in the royal navy of England.

The *Princess Charlotte* was named after the beloved and ill-fated heiress of England; and King Leopold and his late majesty—then Duke of Clarence—had signified their intention of being present at her launch. Great preparations were made for the reception of the royal guests, and immense numbers of people had assembled in the dockyard. The day was bright, clear, and promising. Suddenly, and without any known cause, the sea rose rapidly with a heavy swell, forced open the dock gates, swept away the unfortunate men still engaged about the ship, and bore the *Princess Charlotte* upon the heaving waters, self-launched, amid a cry of horror which those present at the fatal moment never forgot: the bridge above the dock had broken, and the thronging multitudes upon it were precipitated into the dock itself, lately occupied by the ship; and dashed against the stocks and floating timber, or swallowed by the swelling tide. I have been told by those present at the scene that a more fearful spectacle was never witnessed, the awful catastrophe being the more remarkable from the calm loveliness of the day. Old mariners shook their heads at this strange, unhappy coincidence of death and dismay—whilst all was so fair and promising above and in the deep—with the sudden loss of her who had perished in the sunshine of prosperity and love. We remember ourselves years afterwards, that it was a matter of the greatest possible difficulty to get men for the unlucky ship so called.

In the month of March 1777 Quebec was besieged by an American army. The Gulf of St Lawrence was filled with ice, the river apparently impassable, 'when,' we read, 'one morning the besiegers were surprised by the sudden and most unexpected appearance of an English ship, which brought relief to the garrison; and by the supplies she afforded, and the hopes of succour her appearance inspired, was in a great measure the cause of the raising of the siege.' Her name was the *Surprise*, Captain Lindyce.

The *Boyne*, bearing, like the *Calloden*, a name rife with the memory of civil strife, was, like her, unfortunate—she was burned at Spithead.

Sir Cloudesley Shovel's last ship was called the *Association*; and associated as we learn it was in men's minds with a curse pronounced on it at its departure from England, the name becomes singularly ominous. The incident to which we allude is very little known; indeed we heard it only as an oral tradition from the widow of a captain in the navy, whose family were acquainted with some of the actors in the tragedy. In those days naval discipline was severe, even to cruelty, and offences seldom failed of being punished according to the strict letter of the law contained in the Articles of War, be the extenuating circumstances whatever they might. One of the warrant-officers of the *Association*—the gunner, I think—was married to a young and lovely woman who was in delicate health. A few days previous to the ship's leaving port, a message was brought him from the shore, to the effect that she was dying, and that she wished him to come and receive her last farewell. He hastened to ask leave to go on shore, without which of course he dared not comply with her request. He was refused! Some desertions had taken place amongst the men, and the admiral had given strict orders that no leave should be granted. The feelings of the miserable husband as he left the quarter-deck may be imagined. Night was closing in; it was certain that the being dearest to him of all in the world would not behold the next sunrise. He was distracted at the thought, and trusting to the increasing gloom for concealment, resolved, in desperate defiance of orders, to endeavour to swim on shore. Watching his opportunity, accordingly, he leaped from the bowsprit, and succeeded in gaining the boat that had brought him the message, and which had not long pushed off from the ship. He reached the shore, gained his home, and received the dying woman's last sigh; but she lingered in life till the day-dawning, and he could not and would not leave her. It was consequently long after sunrise when the unhappy man returned to his ship. He was aware that he came to meet his death, but his seaman's honour forbade the thought of seeking safety in flight. Nor was he mistaken. He was tried by a court-martial—a privilege accorded to the inferior officers—and condemned to death for disobedience of orders. There was no mercy—no reprieve given! They hung him at the *Association's* yard-arm in the face of the sun, and in view of hundreds of spectators who lined the shore; some of whom, greatly excited, it is said, kneeled on the beach, and invoked a curse on the merciless ship. When brought up for execution, the condemned man requested the chaplain who was in attendance to read aloud to him the 109th Psalm. Under the circumstances there was an awful significance in such verses as these: 'He persecuted the poor helpless man, that he might slay him that was vexed at heart;' and in the solemn curse prophesied against the cruel: 'Let his days be few, and let another take his office.'

A solemn and fearful association was there between those words read aloud to the dying and the fate of the stern ship so called. She perished with all on board on the rocks of Scilly on the night of October 22, 1707. The admiral, it has since been ascertained, was saved from the fury of the sea only to die by the hand of a woman—being murdered in his sleep; and the *Association's* name even has not been renewed—as is generally the case—in any new vessel in the royal navy.

The *Excellent*, like the *Victory*, was happy in the prestige of a lucky name. She was the first ship engaged in the battle off Cape St Vincent, February 14, 1797. Nelson is said to have remarked as she hove in sight: 'Here comes the *Excellent*; she is as good as two added to our number.' The *Calloden* being crippled

and astern, the *Excellent* ranged up within two feet of the *San Nicolas*, giving a most tremendous fire; she fought and took also the *San Isidro*, and engaged the *Santissima Trinidad*. At the present moment this laurel-crowned vessel is in Portsmouth Harbour, employed as the gunnery-ship, on board which the seamen and their officers also are trained for the noble service of the seas. May her name still be ominous of good to our country! The care bestowed on board her, on the moral and intellectual training of the men, is surely as excellent as her past deeds of warlike renown.

The *Dreadnought*, a lucky and famous ship, has also a noble destiny in her age, being used as a seaman's hospital at Greenwich. It is a cheerful name to meet the car of an invalid.

And now, setting aside the notion that the name of a vessel at all influences its destiny, for many lucky names have perished in the waters—as, *par exemple*, the *Royal George*, &c.—we cannot refrain from wishing that all newly-built ships may be permitted to bear appellations of such good omen, that if a curious coincidence be again found between their names and their destinies, it may be such as would give pleasure to us to remember. Sailors are, and, in spite of the schoolmaster afloat, probably ever will be, superstitious. Their life is spent on a wild and poetical element, that rouses and stimulates the imagination; and present peril and uncertainty are apt to make us all cling to the faith of the infant world in presages and omens. It would surely be wise to turn this inherent unreasonableness to good account, by inspiring confidence in their vessel through a gallant or successful name.

The endeavour to overcome superstition in another manner has proved very unsuccessful, as doubtless our readers are aware. We allude to the attempt to prove that Friday was not the unlucky day poor Jack always believed it to be. A ship was built with such an intention some years ago; she was named the *Friday*, was launched on a Friday, sailed on a Friday—which no ship ever does—and was never heard of afterwards! With this curious coincidence, we conclude our gossip about ships' names.

COMPARATIVE POWERS OF LARGE AND SMALL ANIMALS.

In observing the habits of an animal, it is natural sometimes to compare the speed with which it runs, swims, or flies, and the distances and heights which it leaps, with the length of the animal itself, and the weight which it can sustain, with its own weight. This kind of comparison has given rise to an exaggerated estimate of the activity and strength of the muscles of small animals, especially of insects. Authors after authors have copied, without reflection, the allegations of their predecessors on this point, and the fallacy, like many others, has gained power by repetition; so that, in almost every popular work on entomology, we find such statements as these: 'When a flea jumps half a yard, it is as though a man were to leap three hundred yards;' 'If a horse were as active as a grasshopper, he would clear a haystack as easily as the insect skips over a few blades;' 'When a beetle sustains the weight of a folio, he is like a single porter with a house on his back.' It requires only a little consideration of the elementary principles of mechanics to make these paradoxes disappear, and to show that there is no reason to suppose that the muscular power of insects is much greater, in proportion to their size, than that of larger animals. There are two distinct classes of phenomena to be considered, which we shall take in their order; namely—*first*, Speed and activity; and, *secondly*, Sustaining of weights.

1. *Speed and Activity*.—If a pellet of small-shot and a cannon-ball be let drop at the same instant from the same height, in an exhausted receiver (that the

resistance of the air may be removed), they will fall with equal speed, and reach the ground at the same instant. In each case, the thing moved is a certain mass of matter; the moving power is the weight, or gravitation towards the earth, of that mass; and from the fact, that the velocities acquired are the same, we conclude that the weight in each case is proportional to the mass or quantity of matter in the body; that is to say, if the weight of the cannon-ball is one hundred thousand times greater than that of the pellet, it contains also one hundred thousand times as much matter to be moved, and therefore the velocities acquired are equal. In fact, in computing the proportions which moving powers bear to the masses of matter moved by them, we are to consider the absolute velocities produced, without reference to the lengths, or any other dimensions of the moving bodies. To exemplify the application of this principle to the activity of animals of different sizes, let us suppose that an elephant and a flea, whose respective masses are as one thousand millions to one, are found to move with the same absolute speed; and to avoid the complexity which the consideration of the resistance of the air would produce, let us, in the first instance, suppose an imaginary case—namely, that the experiment is made in a receiver exhausted of air. The conclusion to be drawn from such an experiment is, that the muscular power of the flea bears precisely the same proportion to its mass which that of the elephant does; that is to say, if the flea has one-thousand-millionth part of the mass of the elephant to move, it has one-thousand-millionth part of the muscular power to move it with, and therefore moves with the same absolute velocity. The effect of the resistance of the air is, to retard the smaller body more than the larger one, because the surface of the former is the greater in proportion to its mass. Accordingly we find, that the actual speed of insects is generally less than that of larger animals. The distance and the height to which an animal can leap, depend principally on the velocity with which it can dart itself forward or upward at the commencement of the spring, and are modified by the resistance of the air. That velocity depends on the proportion of the muscular power of the animal to its mass. If, therefore, the proportion of muscular power to weight in a grasshopper be merely the same as in a horse, it is only the resistance of the air and the low position of its centre of gravity which prevent the insect from leaping a five-bar gate. To conceive distinctly what is meant by the *moving power* of a muscle, we must observe that this power is jointly proportional to two things—the force or pull which the muscle exerts in contracting, and the distance through which it can contract. In muscles of the same material, and similar form and structure, the force must be proportional to the transverse area of the muscle—the contraction to its length; hence the moving power of the muscle is proportional to the product of its transverse area by its length—that is, simply to its bulk. It is thus evident that there is no reason to conclude, from the speed and activity of insects, that the material of their muscles is of a more powerful nature than that of the muscles of larger animals.

2. *Sustaining of Weights.*—It is well known to engineers that a bridge, or any other structure on a large scale, will not sustain nearly so great a load, in proportion to its bulk, as a small model, though made of the same materials, and similar in every respect except size. This is because the powers of sustaining loads, in two similar structures of the same material and different sizes, are in the proportion of their respective areas, that is, of the squares of their lengths, while the bulks are in the proportion of the cubes of the lengths. For example, let us suppose a model to be made of the Britannia Bridge, of wrought-iron plates of the same quality, put together in the same manner, and of one-tenth part of the dimensions of the actual bridge in every direction,

the plates being also of one-tenth part of the thickness. The bulk and weight of this model would be *one-thousandth* part of those of the actual bridge, while it would be capable of sustaining *one-hundredth* part of the load. Hence the model could sustain a load *ten times greater*, as compared with its bulk, than the actual bridge can. If insects were exact models of the larger animals, and their structure of materials of the same strength, they ought naturally, according to the principles above explained, to be able to sustain immensely greater loads in proportion to their bulk. In the case of beetles, this power is increased by their being clothed in armour.

It appears then, on the whole, that we have no reason to conclude, from the speed, activity, or strength of insects, that their muscular power is either greater or less, in proportion to their bulk, than that of larger animals; and that the paradoxes on this subject, which have been so often expatiated upon, especially in works of a popular character, are founded on an illusive mode of comparison.

THE FORTUNES OF SAN FRANCISCO.

ON the southern shore of an inlet of the Pacific, the Spaniards, some time in the latter part of the last century, erected a Presidio or fort, consisting of a square court enclosed with mud-walls pierced for musketry. Within these walls were some small dwellings for the soldier settlers, while the centre of the area was kept clear for their exercise. This fort, which fell long ago into ruins, was destined to play rather an important part in the world's history. In the year 1776, two wandering missionaries, natives of Spain, but last from Mexico, landed in the bay; and under the protection of the military station, they founded a Mission at some little distance, and set to the work of civilising and Christianising the native tribes around them. The names of these individuals were Francisco Palou and Benito Canebon; the mission was called Dolores, in commemoration of the sufferings of the Virgin; and it became the parent of many others in the same country.

The good fathers appear to have settled quietly down, and to have found little difficulty in their labour of love. They erected a church, with dwellings around it for themselves and attendants, and the natives built their huts in squares at a little distance. Not far off, a secular settlement was likewise attempted, but proceeded the length of only a few houses. It was called Yerba Buena, after an herb of that name found on the hills, and esteemed for its medicinal qualities, as well as used by way of a substitute for tea. The first settlers there were from Mexico, excepting a Russian, who, being left behind by a Russian ship, cast in his lot with theirs. But the town is not worth talking about as yet—the Mission drew every kind of prosperity to itself. Soon after its organisation, says an authority, it flourished rapidly, realising all the hopes of its founders. The Indians placed the most devout confidence in the Padres, embracing readily the new religion, and acquiring with it many of the arts of civilisation. They continued to live apart in small communities, employing themselves in tilling the earth and other labours under the direction of the missionaries; and for their work, of eight hours in the day, they received from them food, trinkets—and rum. At various times, parties of Indians were provided with the proper means, and dismissed by the missionaries, that they might pursue an independent life. But we are told the attempt invariably failed, and that the natives sooner or later returned to seek the protection and guardianship of the Padres, after wasting their cattle and other stock. Some idea may be formed of the extent of those operations, from the fact, that there belonged to this mission, at one period, 20,000 head of cattle, 3000 horses, and 30,000 sheep. In 1810, the number of Christian baptisms had reached 3896; and

in 1831, the period of greatest prosperity, the whole number had amounted to 6883. From this date, a declension took place, which was greatly accelerated by the Mexican Revolution, in 1836, when the cattle and property were destroyed, and the Indians driven off by political disturbances. From 1831 to 1849, the number of baptisms was only 468. Of the entire list, it is computed that nine-tenths were Indians, and the remainder Californians, or immigrants, and their descendants, principally from Mexico.

In 1839, the secular town, if that can be called a town which contained only a few scattered houses, was planned and laid out by Captain John Vioget; and in half-a-dozen years it contained 150 inhabitants. About this time, when the war between America and Mexico had commenced, there began to flock to it some American adventurers, and in two years the population was increased by several hundreds. At the beginning of 1847, this slowly-moving town, whose ambition was confined to agricultural pursuits, changed its name. Instead of Yerba Buena, it was now San Francisco; and although its houses were but huts of one or two rooms, built chiefly of adobes, it was ordained that no hogs should be allowed to run at large, and no firearms be discharged within the distance of a mile, under the pain of a fine of five dollars and twenty dollars for the offences respectively. In this memorable year, the last of rural labour, tranquillity, and slow but steady progress, six members of council were elected by 200 votes, a semi-monthly mail was established to some southward points, and a small steam-boat made a successful expedition round Wood Island.

In 1848, the province was formally ceded by Mexico to the United States; and almost simultaneously a feverish feeling, connected with metallic riches, broke out in the small community. Quicksilver-mines were dreamed of; copper was said to be discovered somewhere; salt-petre, sulphur, limestone, coal—all, in turn, had their seers and prophets; silver, at length, became the rage—the whole country was believed to be underlaid with the precious ore. Gold was then hinted at—talked of—trumpeted; but wise men laughed at the splendid illusion. Louder and louder grew the buzz, till the laugh was drowned in the noise; and then, almost on a sudden, there was no sound heard in San Francisco. Stores closed, and empty houses everywhere met the eye. The population had almost wholly ebbed away; and of the numerous placards of American industry, the only one prominent in the town was this: 'Highest price paid here for Californian gold.' 'The temporary suspension of trade and business was soon followed by the most extraordinary activity. Adventurers from all nations, and merchandise of all kinds, began to pour into the town, on their way to the mining region. Buildings that had been vacated, were filled with newly-arrived gold-seekers, hurrying to the mines. Store-houses were in demand for mercantile purposes; and labour, which had been but one or two dollars a day prior to the discovery of gold, was not to be had at any price. Carpenters often refused fifteen and twenty dollars a day. Schools and churches were forgotten; and if public meetings were held, the object was to fix the value of gold-dust, or to make plans for testing it. In August, immigrants began to arrive at the rate of 500 a month. In the middle of September, the harbour was described as crowded with shipping, the wharfs lined with goods and merchandise, and the streets filled with a busy throng. Fifty persons, it was computed, spent the night without the cover of a roof.'

In September of that year, a grand event occurred in the history of San Francisco. This was the arrival in the port of the first square-rigged vessel; and no sooner was it known that she was actually discharging her cargo, than goods of all kinds fell prodigiously in price, and town-lands rose from 50 to 100 per cent. A lot bordering on the water, which had been offered

for 5000 dollars, and refused by everybody, sold the next day for 10,000 dollars. In the same month, the first brick-building was erected. All sorts of ambitious projects were talked of: a temperance society—a lyceum—an hospital—a theatre. A chaplain to the 'city' was installed—a city which now polled the not very extravagant number of 347 votes at an election of councilmen. Before the year closed, the mining adventurers, who had returned home for the winter, found that some very remarkable changes had taken place. Lots of land they had left selling for 2000 dollars, had risen to 15,000 dollars; and houses they could have rented for 20 dollars a month, were now charged at 100 dollars.

In February 1849, the arrival of the first steam-ship in the mail-service set the citizens wild with rapture and exultation; but in a few months, the harbour was crowded with vessels of all kinds, and immigrants landed in thousands. Then came the launch of a little iron steam-boat, and her experimental trip to the Sacramento. On this occasion, she brought back a number of salmon from the golden river, some of which sold for forty-five dollars apiece. This vessel was soon followed, on the same route, by other steamers, and the expeditions of the miners were shortened from seven days to seventeen hours.

Great fortunes are sometimes made in a manner not very cleanly; and even so it happened with this city, which was called suddenly forth, by the magic of gold, from a foundation of mud. In the following winter, which chanced to be as wet as our last winter in England, all San Francisco was a quagmire. To remove the mud was impossible; but the inhabitants tried to make it of a thick enough consistence to admit of passage, by laying down upon the streets a layer of brushwood and rubbish. But layer after layer disappeared in the unfathomable abyss, and with it, now and then, an unfortunate mule. When men were adventurous enough to attempt crossing, they sometimes owed their lives to their neighbours. Tradition tells of one person who actually disappeared under these circumstances. The intersection of Clay and Montgomery Streets being a principal thoroughfare, was the scene of many interesting and exciting incidents. To cross on foot became completely impossible, until a submerged footway was constructed with bags of beans, damaged rice, bundles of tobacco, and a general assortment of spare merchandise. Over this invisible bridge, experienced navigators might succeed in making their way; but woe to the unskilled wayfarer who, in attempting the path, deviated from the subaqueous line of march! In the dearth of business and amusements, many citizens found agreeable employment in watching the progress of their fellow-men through the difficulties of travel, and rendering assistance in desperate cases. New-comers often landed from shipboard rigged in their Sunday's best, and with boots brightly polished, intending to strike the natives with surprise by such tokens of high civilisation; but scarcely had they touched terra firma, when they made the deep discovery, that terra firma was not there; and they were glad to get back to the ship, with the loss not only of Day & Martin's polish, but of the boots themselves, which they were constrained to leave deep buried in the streets of San Francisco!

Another curious trait of the Golden City. 'In those days,' says our authority—the mushroom citizen is talking of 1849!—'before the recent improvements in the delivery of letters, the post-office exhibited the most curious scenes on the arrival of the mails from the Atlantic states. People crowded by hundreds into the long lines, to march to the windows in quest of letters from home. Desperate efforts were made to secure a place near the window, in anticipation of the opening of the office. Men rose from their beds in the middle of the night for this purpose. It was a common

practice to provide a chair, and hitch up, step by step, as the procession slowly advanced, whiling away the time with cigars and other appliances. Persons were exposed for hours to the most drenching rains, which they bore with heroic fortitude, rather than relinquish their post. Men of speculative views, who expected no letters, secured advanced places, and then sold them, sometimes for as much as eight or ten dollars.*

In those days, too, the dress of the city was picturesque in its infinite variety—comprehending jackets, hangups, Spanish wrappers, serapes, blankets, bearskins; boots with red or green tops, horsemen's boots, miners' boots, fishermen's boots; and a splendid choice of hats, of which the most popular was the California slouch—convertible at will into a pillow, a basin, a handkerchief, or a basket. When female immigrants, however, began to flock into the city, the picturesque declined, and the gold-seekers sent off in a hurry to Broadway for models of costume. Two theatres sprang up, with crowds of drinking and gambling houses; and the citizens, being now in the broad path of city civilization, amused themselves with concerts, balls, dinner-parties, and military suppers. By this time, San Francisco had extended into the country, and absorbed into itself the Mission of the reverend Padres.

In 1849, occurred the first of eight or nine conflagrations, which have, from time to time, up to last year, reduced a considerable portion of the city to ashes. About the same time, the first step was taken to extinguish the Golden City with a debt, which speedily amounted to a million and a half of dollars. In January 1850, three females arrived from Sydney; and being unable to pay for their passage, they were publicly sold for five months by the captain of the ship. They fetched fifteen dollars each. In this year, there were six daily newspapers published in San Francisco, to which two more were added in the following year. There were likewise seven churches in the city. The harbour was crowded with large vessels from all the great ports in the world; but once there, return was impossible. The crews deserted in a body, and rushed to the mines; many of the ships were dragged up the beach at high-water, and converted into storehouses: one of them became a large hotel. Another singular feature of the city was formed by the Chinese immigrants. At a grand funeral procession, commemorative of the death of the American president, Taylor, a body of those curious-looking citizens attended in their national costume, and ever since they have exhibited great interest in all public demonstrations, parading with banners and music. One of the most remarkable of these occasions, was the celebration of the admission of California into the American Union in 1850.

In 1851, the streets were paved with wood in such a way as to defy the mud, and they were begun to be brilliantly lighted, when one of the usual conflagrations occurred, which ate out the heart of the city, the centre of business, leaving only straggling outskirts. But this proved a benefit rather than a misfortune, for it roused in earnest the extraordinary energies of the people; and the burned district was speedily covered with houses, pretty nearly fire-proof. For this reason, the fire of last November was comparatively a mere trifle: the damage was only 100,000 dollars, while that of the former conflagration was computed by millions. The following is a picture of the city as it now stands:—

'The city of San Francisco stands on a narrow neck of land between the bay and the ocean, fronting eastward on the bay, and having the ocean five miles on the west. The bay extends southward some fifty miles, parallel with the sea, from which it is separated by a narrow strip of land, varying from five to twenty miles in width. The city is on the extreme point of this promontory. Its site is handsome and commanding, being on an inclined plane, half a mile in extent, from the water's edge to the hills in the rear. Two points of

land—Clark's Point on the north, and Rincon Point on the south, one mile apart—project into the bay, forming a crescent between them, which is the water-front of the city, and which has already been filled in and covered with buildings to the extent of half a mile. Those points, and the lofty hills north and west, upon which the city is rapidly climbing, afford a most extensive and picturesque view of the surrounding country. There are scarcely to be found more charming and diversified prospects than are presented from these heights. Taking your stand on Telegraph Hill, to the north of the city, and looking eastward, you see the spacious bay, eight miles in width, crowded with ships from all quarters of the globe; and the fertile coast of Contra Costa beyond, with its new city of Oakland, behind which rise hill on hill, to the Redwood forests on the summits. Towering over these, is the conical peak of Mount Diablo, at a distance of thirty-five miles. To the north, is the entrance from the ocean, almost beneath your feet; and Sausalito, six miles distant, at the foot of the opposite hills. The northern arm of the bay also stretches away till lost in the distance, studded with smoking steamers on their way to the numerous points on the Sacramento and San Joaquin rivers. Turning to the south, you look down on the busy city, whose tumultuous din rings steadily in your ear—the Mission Dolores, in a charming little valley beyond, backed by graceful hills—the southern arm of the bay lost in the horizon—and the dim and distant coast-range of mountains running parallel on the east. Facing the west, you look upon the narrow strait through which the restless ocean ebbs and flows, and into which the sea-breeze sweeps daily with its chilling but purifying mists—the Golden Gate—the Presidio—the Fort—the great ocean beyond.'

Finally, the extracts we have given throughout this article are from the preface to a Directory published in January last—a directory of 9000 names and addresses for this city, which, half-a-dozen years ago, consisted of a few straggling huts; and which now, as we learn from the census of last year—received since writing the above—contains a population of 34,876 souls. Of this number, only 5154 are females. The foreign residents amount to 16,144 males, and 2710 females; the remainder, with the exception of a few hundred negroes and mulattoes, being citizens of the United States. Verily, there are few episodes in the history of the world more remarkable than the fortunes of San Francisco.*

DANCE OF DEATH.

Aqua-ardiente and dulces were handed round; while all, men and women—the dancers excepted—smoked their cigarillos. But the most remarkable thing in the room seemed to me a large kind of scaffold, which occupied the other corner opposite the bed, consisting of a light framework, ornamented all over with artificial flowers, little pictures of saints, and a quantity of small lighted wax-candles. On the top of it, a most extraordinary well-made wax-figure of a little child was seated on a low wooden chair, dressed in a snow-white little frock; the eyes were closed, the pale cheeks tinged by a soft rosy hue, and the whole figure perfectly strewn with flowers. It was so deceptive, that when I drew near at first, I thought it a real child, while a young woman below it, pale, and with tears in her eyes, might very well have been the mother. But that was most certainly a mistake; for at this moment one of the men stepped up to her, and invited her to the dance, and a few minutes afterwards, she was one of the merriest in the crowd. But it must really be a child—no sculptor could have formed that little face so exquisitely; and now one light went out, close to the little head, and the cheek lost its rosy hue. My neighbours at last re-

* The population of the whole state is 264,435. The capital invested in mining operations is 13,897,447 dollars, of which gold-mining has about one-third. The capital employed for all other purposes is 41,061,933 dollars.

marked the attention with which I looked upon the figure or child, whichever it was; and the nearest one informed me, as far as I could understand him, that the little thing up there was really the child of the woman with the pale face, who was dancing just then so merrily; the whole festivity taking place, in fact, only on account of that little angel. I shook my head doubtfully; and my neighbour, to convince me, took my arm and led me to the frame, where I had to step upon the chair and nearest table, and touch the cheek and hand of the child. It was a corpse! And the mother, seeing I had doubted it, but was now convinced, came up to me, and smilingly told me it had been her child, and was now a little angel in heaven. The guitars and caces commenced wildly again, and she had to return to the dance. I left the house as in a dream, but afterwards heard the explanation of this ceremony. If a little child—I believe up to four years of age—dies in Chili, it is thought to go straight to heaven, and become a little angel; the mother being prouder of that—before the eyes of the world at least—than if she had reared her child to happy man or womanhood. The little corpse is exhibited then, as I had seen it: and they often continue dancing and singing around it till it displays signs of putrefaction. But the mother, whatever the feelings of her heart may be, must laugh, and sing, and dance; she dare not give way to any selfish wishes, for is not the happiness of her child secured? Poor mother!—*Gerstaecher's Journey Round the World.*

THE SILKWORM ITS OWN DYER.

M. Ronlin was lately experimenting upon silkworms, by giving them coloured articles of food; and he found that, by mixing indigo in certain proportions with the mulberry-leaves eaten by the worms just as they were about to spin their cocoons, he was able to give a blue tinge to the silk. Prosecuting still further his experiments, he sought a red colouring matter capable of being eaten by the worms without injury. He had some difficulty in finding such a colouring matter at first, but eventually alighted on the *Bignonia Chica*. Small portions of this plant having been added to the mulberry-leaves, the silkworms consumed the mixture, and produced red-coloured silk. In this manner, the ingenious experimenter hopes, by prosecuting his researches, to obtain from the worm silk of many other colours.—*Critic.*

AN ARAB FEAST.

The couscous is a corn cake, the flour of which is rolled on a bolter-like powder. This cake, cooked by the vapours of meat, is basted the moment before it is served up, either with milk or with the bouillon of the mutton, for the Arabs never eat beef, unless forced by hunger to do so. Enormous dishes, hollowed out of a single block of the walnut-tree, receive the cake and the pyramid of boiled meat and vegetables that surmount it. Little wooden spoons are then distributed to the guests, and all plunge at once into the smoking mountain down to its centre, where the pasty is warmest and most saturated with the bouillon. . . . Meantime, other servants brought in porringers without number, filled with ragouts of a thousand sorts: eggs prepared with red pepper, fowls in onion sauce, pimentos powdered over with saffron, and so many other good things, that the French palate must have become somewhat Arabised to relish them. . . . A dozen Arabs soon came forward, carrying on long poles sheep roasted entire. Pulled on one side and pushed on the other, the sheep slipped from the poles, and fell, so being dished up, on a large cloth of blue cotton. An Arab, skilled in carving, then made large cuts in the animal with his knife, to facilitate the entrance of our hands into the interior; when every one tore out such bits as struck his fancy. To these roasts, worthy of the heroes of Homer, succeeded dishes of milk, sugar, and raisins, &c., pasties by thousands; and when these, which closed the feast, were removed, large ewers were brought to every guest, who, having washed his hands in these silver basins, smoked his pipe or his cigar, sipping the white boiled coffee, handed to him in little cups without handles, in silver stands, to protect his fingers from the heat.—*Castellane's Military Life in Algeria.*

THE PLANTING.

A PARABLE.

'I said to my little son, who was watching, with tears, a tree he had planted: "Let it alone; it will grow while you are sleeping!"'

'PLANT it safe, thou little child:

Then cease watching and cease weeping:

Thou hast done thy utmost part;

Leave it, with a quiet heart:

It will grow while thou art sleeping.'

'But, O father!' says the child,

With a troubled face close creeping—

'How can I but think and grieve,

When the fierce winds come at eve,

And snows beat—and I lie sleeping?

'I have loved my linden so!

In each leaf seen future floweret;

Watched it day by day with prayers,

Guarded it with palms and cares,
Lest the canker should devour it.

'O good father!' says the child,

'If I come in summer's shining,

And my linden-tree be dead—

How the sun will scorch my head,

Where I sit forlorn and pining!

'Rather let me evermore

Through this winter-time watch keeping,

Bear the cold, and storms, and frost,

That my treasure be not lost—

Ay, bear aught!—but idle sleeping.'

Sternly said the father then:

'Who art thou, child, vainly grieving?

Canst thou send the balmy dews,

Or the rich sap interfuse,

That one leaf shall burst to living?

'Canst thou bid the heavens restrain

Natural tempests for thy praying?

Canst thou bend one tender shoot?

Stay the growth of one frail root?

Keep one blossom from decaying?

'If it live and bloom all fair,

Will it praise thee for its blooming?

If it die, will any plants

Reach thee, as with kings and saints

Drops it to an equal tombing?

'Plant it—consecrate with prayers.

It is safe 'neath His sky's folding

Who the whole earth compasses,

Whether we watch more or less—

His large eye all things beholding.

'If He need a goodly tree

For the shelter of the nations,

He will make it grow; if not,

Never yet His love forgot

Human tears, and faith, and patience.

'Leave thy treasure in His hand—

Cease all watching and all weeping.

Years hence, men its shade may crave,

When its mighty branches wave

Beautiful—above thy sleeping!'

If his hope, tear-sown, that child

Garnered safe with joyful reaping,

Know I not: yet, unawares,

Oft this truth gleams through my prayers:

'It will grow while thou art sleeping!'

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